Sage Grouse Advisory Council – Montana

Tim Rasmussen

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With more than eight decades of energy-field experience in the Rocky Mountain region, WBI Energy provides a variety of services including:

WBI ENERGY TRANSMISSION
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- Natural gas transmission pipeline
- Natural gas storage

WBI ENERGY MIDSTREAM
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- Natural gas and oil gathering pipeline
- Natural gas processing and conditioning
- Pipeline leak detection
- Glycol recycling
- Energy facility mgt

WBI ENERGY CORROSION SERVICES
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- Cathodic protection
- Corrosion equipment and materials
- Air/hydro excavation

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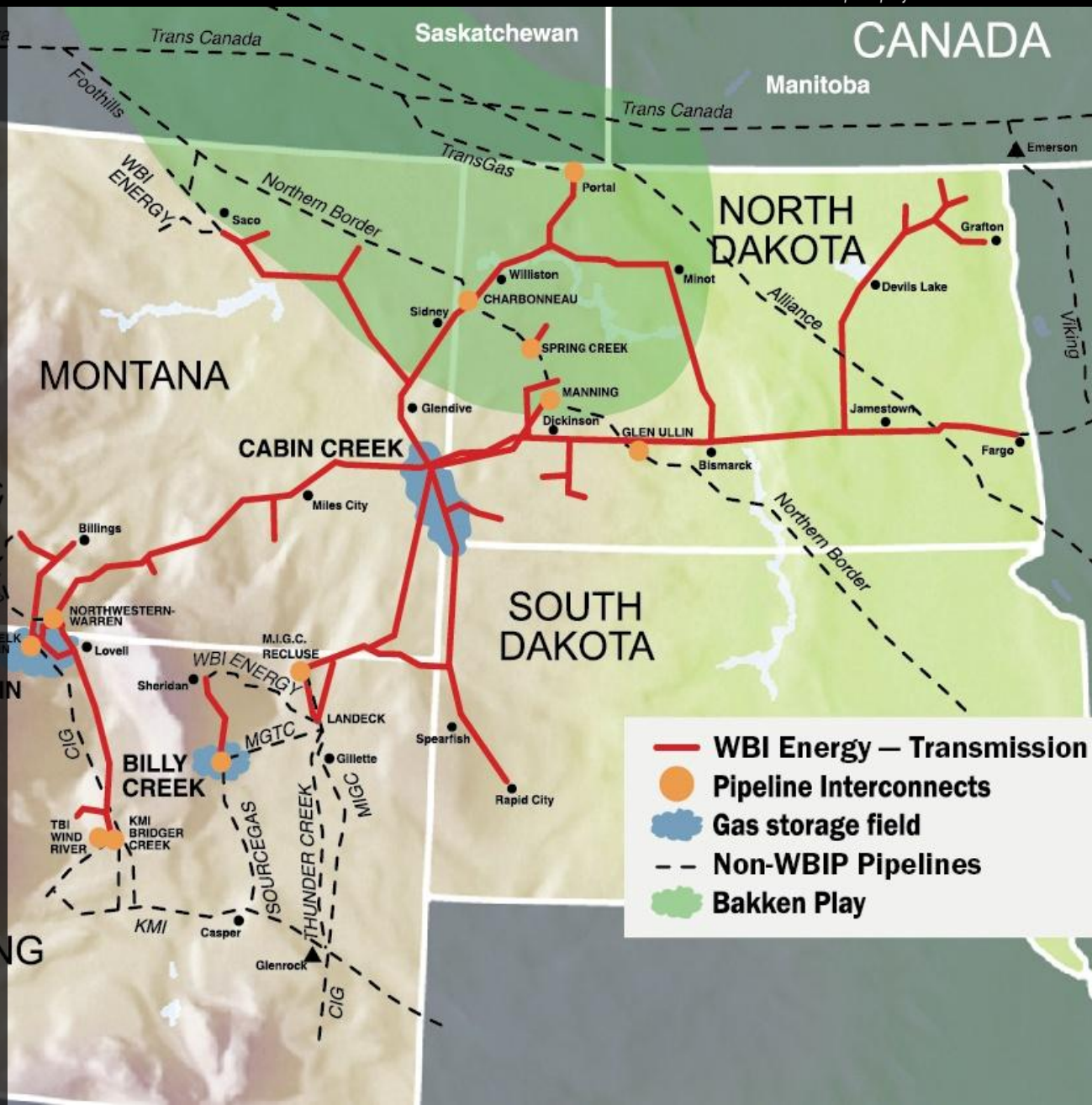
- **Regulated operations**
  - 3,800 miles of pipeline
  - Over 1 Bcf/d system capacity
  - 33 compressor stations
  - 13 interconnecting points
  - 3 storage fields with 193 Bcf working storage capacity
- **Non-regulated operations**
  - 1,700 operated miles of pipeline
  - Producer/energy services
    - Gas and oil gathering
    - Gas processing
    - Cathodic protection



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Regulatory oversight by the Federal Energy Regulatory Commission

Grasslands Pipeline -- 2003

Submitted 125 filings to FERC, plus filings to the federal AND state offices of:

- **U.S. Forest Service**
- **U.S. Fish and Wildlife Service**
- **U.S. Dept. of Transportation**
- **U.S. Army Corps of Engineers**
- **U.S. Environmental Protection Agency EIS 24 mths**
- **Bureau of Land Management**
- **State Historical Preservation Office**

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Numerous reports also submitted to the counties where the pipeline operates including:

- Road use agreements and oversize trip permits
- Construction use permits
- County road crossing authorization
- Water discharge permits
- Hazardous material recordation and storage
- Zone changes
- Noxious weed control

In 2003, compliance activities represented approx. 10 percent of total project cost or about $7 million.

Compliance Actions: Species Protection

- Biological studies on greenfield projects.
- Consult with the USFWS on all annual report projects.
- Manage seasonal stipulations (through July 15).
- If construction cannot be delayed through the seasonal stipulations, we hire third party to do an aerial or pedestrian survey for nesting birds prior to any mowing of the ROW.
- Complete bald eagle winter roost surveys if construction occurs between Nov 15 to March 15 in areas potentially suitable for winter roost habitat.
- Completed field surveys for prairie dogs.
- Trained personnel on identification of whooping cranes to ensure sightings are reported and work stopped.

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PROCEDURE: New Pipeline Expansion Projects

New pipeline segments are FERC-regulated projects reviewed under the NEPA to minimize impacts to wildlife and native vegetation.

- **Scoping meetings identify key resource issues and address minimization methods (i.e., time windows, buffers, etc.), and early planning and coordination with the FWS can identify specific time windows to prevent disturbances to sage grouse and their broods.**

- **Complete and specific project and pipeline route maps are provided.**

PROCEDURE: New Pipeline Expansion Projects

- Project sponsors required to consult with the FWS under Endangered Species Act to avoid impacts to threatened and endangered species. Preventing impacts to candidate species is also included.
- Early planning and coordination with the FWS identifies sensitive habitats, and considers route modifications and what access roads can be used to reduce impacts to sensitive habitats.
- Pre-construction surveys of areas of known leks and other important habitats are typically required.
- Restricted right-of-way widths can be considered to further reduce habitat disturbance.

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PROCEDURE: Operation and Maintenance Projects

Projects include inspection, relocation, pipe class upgrades and replacement, and are infrequent and short term.

- **Project footprints are generally small and the extent of vegetation disturbance is limited.**
- **Projects do not add to habitat fragmentation. They are restricted to FERC certificated right-of-way that has been previously disturbed and previously used access roads. No new access roads or rights-of-way will be constructed.**

PROCEDURE: Operation and Maintenance Projects

- Projects are typically short-term and disturbance may require a few days or up to a month.
- Projects can be designed to avoid sensitive seasons (i.e., courtship and nesting season), and the activities can be restricted to specific day parts in the most sensitive areas.
- Activities do not require constant vehicle traffic. Mobilization of equipment occurs at project start; demobilization occurs when project is finished. Personnel vehicle traffic generally occurs twice a day.

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PROCEDURE: Operation and Maintenance Projects

- Sites are restored and revegetated following right-of-way contouring.
- Since projects are FERC regulated, pipeline companies are obligated to monitor revegetation success.

COT Risk and Mitigation:

THREAT: Noise Abatement

Current:

- **WBI Energy routinely works to eliminate noise disturbance within reason to maintain noise thresholds designated by OSHA for worker safety.**
- **WBI Energy places compressor facilities in insulated buildings and, where appropriate, lines exterior of locations with conifer trees for natural sound abatement.**
- **WBI Energy has applied other noise abatement technologies to some stations at landowner request.**
- **FERC regulatory requirement for new stations -- not to exceed 55 decibels at any pre-existing noise sensitive area (schools, hospitals, residences).**

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Sound sources (noise) Examples with distance	Sounds pressure Level L_p dB SPL
Jet aircraft, 50 m away	140
Threshold of pain	130
Threshold of discomfort	120
Chainsaw, 1 m distance	110
Disco, 1 m from speaker	100
Diesel truck, 10 m away	90
Curbside of busy road, 5 m	80
Vacuum cleaner, distance 1 m	70
Conversational speech, 1 m	60
Average home	50
Quiet library	40
Quiet bedroom at night	30
Background in TV studio	20
Rustling leaves in the distance	10
Hearing threshold	0

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COT Risk and Mitigation:

THREAT: Noise Abatement

Possible future mitigation efforts:

- **Research needed to discover what "level" of noise is disruptive to birds.**
- **Once discovered, investigate feasible options to apply specified noise level abatement to new compressor stations located directly within PACs.**
- **Fundamental mitigation, however, is avoidance of PAC locations if at all possible and feasible considering FERC-mandated service reliability and integrity to operate "in the public good."**

COT Risk and Mitigation:

THREAT: Disruptions During Construction

Current:

- **Construction is temporary disturbance. Example: Installed 247 miles of pipeline for Grasslands Pipeline in four to five months.**
- **Small footprint, restricted to existing ROW**
- **Short-duration project.**
- **Designed to avoid sensitive seasons and parts of the day.**
- **FERC oversight throughout**

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COT Risk and Mitigation:

THREAT: Disruptions During Construction

Possible future mitigation efforts:

- **Avoid and minimize impacts in consultation with FERC and other agencies.**
- **Avoidance, where possible, for new construction to include the potential of directional boring under short-run sensitive areas.**
- **Related to sage brush – mow, rather than remove/replace top-soil in PAC areas.**

COT Risk and Mitigation:

THREAT: Invasive species on ROWs

Current:

- **ROW reclaimed with blended grass seed recommended sources including BLM, Forest Service, Soil Conservation District and landowner.**
- **If invasive weeds are identified by agencies or landowners, we address the issue. In addition, FERC completes inspections for proper revegetation and requires remediation if problems are recognized.**

Possible future mitigation efforts:

- **Maintain current practices.**

COT Risk and Mitigation:

THREAT: Surface disturbance

Current:

WBI Energy estimates that pipeline ROW within a section of land comprises approx. 1.5 percent of sectional land mass.

Interesting fact: In 2009, Bureau of Land Reclamation's Remote Sensing and Geographic Information Team estimated that energy facilities comprise 0.4 percent of land cover in the Cedar Creek Anticline in eastern and southern Montana.

Possible future mitigation efforts:

- **Avoid disturbances where possible and minimize impacts within PACs in consultation with the appropriate agencies.**

COT Risk and Mitigation:

THREAT: Water Ponds / West Nile Virus

Current:

Pipeline operations maintain evaporation ponds at compressor stations as temporary containment prior to evaporation. These vary in size depending on size of the station.

Possible future mitigation efforts:

Seasonally spray an approved insecticide on pond surface water within PAC areas upon review and approval by the appropriate agencies.

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SUMMARY:

Possible future mitigation efforts

1. Research needed to discover what "level" of noise is disruptive to birds.
2. Once discovered, investigate feasible options to apply specified level of noise abatement to new compressor stations located directly within PACs.
3. Fundamental mitigation, however, is avoidance of PAC locations if at all possible and feasible considering FERC-mandated service reliability. For new construction, consider the potential of directional boring under short-run sensitive areas.
4. Related to sage brush – mow, rather than remove/replace top-soil in PAC areas.
5. Seasonally spray an approved insecticide on pond surface water within PAC areas upon review and approval by the appropriate agencies.

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A healthy sage grouse population can co-exist with energy operations. Our experience in Cedar Creek Anticline demonstrates the point.

Let's focus on sound science and resulting mitigation efforts based on research and proven effectiveness.